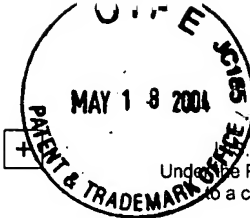




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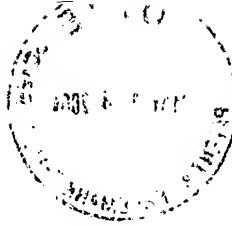
TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/066,160
	Filing Date	1/31/2002
	First Named Inventor	Steven Teig, et al.
	Group Art Unit	2825
	Examiner Name	Dinh, P.
Total Number of Pages in This Submission	Attorney Docket Number	SPLX.P0073

Enclosures (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declarations(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Documents <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosures (Listed below): Postcard Form 1449 115 cited references
Remarks:		

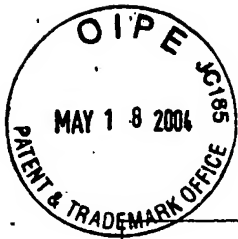
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm Or Individual name	Mani Adeli, Reg. No. 39,585 of Stattler Johansen & Adeli LLP
Signature	
Date	May 18, 2004

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Signature		Date	May 18, 2004

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PATENT
Docket No. SPLX.P0073

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Mani Adeli

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of:

Steven Teig, et al.

Serial No.: 10/066,160

Filing Date: 1/31/2002

For: METHOD AND APPARATUS FOR
SELECTING A ROUTE OF A NET BASED ON
THE IMPACT ON ROUTES OF OTHER NETS

**INFORMATION DISCLOSURE
STATEMENT UNDER 37 C.F.R. § 1.97**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. § 1.97 and § 1.98, applicants submit with this Information Disclosure Statement the attached Form PTO-1449, and copies of the documents listed in the 1449 form for consideration by the Examiner. The Examiner is requested to make these documents of record. Applicants would appreciate the Examiner initialing and returning the Form PTO-1449, indicating that the information has been considered and made of record herein.

This Information Disclosure Statement under 37 C.F.R. § 1.97 is not to be construed as a representation that: (i) a complete search has been made; (ii) additional information material to



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the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

This Information Disclosure Statement is submitted after receipt of a first Office Action on the merits but before the Final Office Action. Accordingly, a fee is required. However, Applicants note that on this day, May 14, 2004, Applicants have submitted another Information Disclosure Statement in electronic form and paid the requisite fee along with this electronic submission. See attached hard copy of electronic IDS and its fee transmittal. Therefore, Applicants submit that no separate fee is required for this Information Disclosure Statement.

However, in the unlikely event that the Patent Office determines that additional fees, extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 50-1128 referencing SPLX.P0073. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: May 14, 2004

Respectfully submitted,

By:


Mani Adeli

Registration No. 39,585

Stattler, Johansen & Adeli LLP
P.O. Box 51860
Palo Alto, CA 94303-0728

Phone No. (650) 752-0990 x102
Fax No. (650) 752-0995

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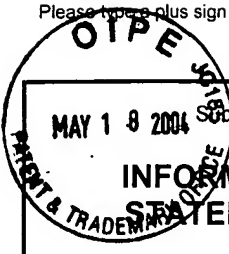
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 Substitution for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/066,160
				Filing Date	1/31/2002
				First Named Inventor	Steven Teig, et al.
				Group Art Unit	2825
				Examiner Name	Dinh, Paul
Sheet	1	of	9	Attorney Docket Number	SPLX.P0073

U.S. PATENT APPLICATIONS						
Examiner* Initials	Cite No. ¹	U.S. Patent Application		Name of Patentee or Applicant of Cited Document	Date of Filing MM-DD-YYYY	Related Application Data if any
		Serial Number	Attorney Docket Number			
	1.	10/066,060	SPLX.P0072	Steven Teig	01-31-2002	Application filed on the same date, with same specification and drawings, but with different summary and abstract.
	2.	10/066,095	SPLX.P0074	Steven Teig et al.	01-31-2002	Application filed on the same date, with same specification and drawings, but with different summary and abstract.
	3.	10/066,047	SPLX.P0078	Steven Teig et al.	01-31-2002	Application filed on the same date, with same specification and drawings, but with different summary and abstract.
	4.	10/061,641	SPLX.P0079	Steven Teig et al.	01-31-2002	Application filed on the same date, with same specification and drawings, but with different summary and abstract.
	5.	10/066,094	SPLX.P0080	Steven Teig et al.	01-31-2002	Application filed on the same date, with same specification and drawings, but with different summary and abstract.
	6.	10/076,121	SPLX.P0081	Steven Teig et al.	02-12-2002	CIP of 10/066,094.
	7.	10/062,995	SPLX.P0105	Steven Teig et al.	01-31-2002	Application filed on the same date, with same specification and drawings, but with different summary and abstract.
	8.	10/066,102	SPLX.P0106	Steven Teig	01-31-2002	Application filed on the same date, with same specification and drawings, but with different summary and abstract.
	9.	10/066,187	SPLX.P0133	Steven Teig et al.	01-31-2002	Application filed on the same date, with same specification and drawings, but with different summary and abstract.
	10.	10/286,584	CDN.P0037	Steven Teig	10-31-2002	
	11.	10/335,087	CDN.P0038	Steven Teig et al.	12-31-2002	
	12.	10/335,239	CDN.P0039	Steven Teig et al.	12-31-2002	

Examiner Signature		Date Considered	
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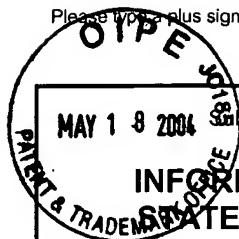
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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/066,160
				Filing Date	1/31/2002
				First Named Inventor	Steven Teig, et al.
				Group Art Unit	2825
				Examiner Name	Dinh, Paul
Sheet	2	of	9	Attorney Docket Number	SPLX.P0073
U.S. PATENT APPLICATIONS					
	13.	10/335,086	CDN.P0040	Steven Teig et al.	12-31-2002

FOREIGN PATENT DOCUMENTS								
Examiner* Initials	Cite No. ¹	Foreign Patent Document			Date of Publication MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code (if known) ⁵				
	14.	JP	11-296560		10-29-1999	Matsumoto et al.	with English translation of Abstract;	
	15.	JP	2000-082743		03-21-2000	Igarashi et al.	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	√
	16.	JP	64-15947		01-19-1989	Ouchi	with English translation of Abstract;	
	17.	JP	03-173471		07-26-1991	Tawada et al.	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	√
	18.	JP	04-000677		01-06-1992	Fujiwara et al.	with English translation of Abstract;	
	19.	JP	05-102305		04-23-1993	Sato	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	√
	20.	JP	05-243379		09-21-1993	Kubota	with Japanese Patent Office's English translation of Abstract;	√

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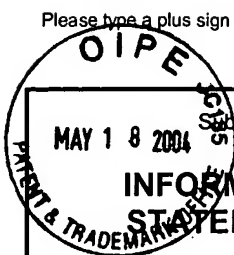
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number 10/066,160 Filing Date 1/31/2002 First Named Inventor Steven Teig, et al. Group Art Unit 2825 Examiner Name Dinh, Paul				Sheet 3		of 9		Attorney Docket Number SPLX.P0073	

FOREIGN PATENT DOCUMENTS

						and with English translation of the application.	
21.	JP	07-086407		03-31-1995	Miura	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
22.	JP	09-162279		06-20-1997	Yoshida	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓

NON PATENT LITERATURE DOCUMENTS

Examiner* Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	23.	Chen, H.F. et al., A Faster Algorithm for Rubber-Band Equivalent Transformation for Planar VLSI Layouts, IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, vol. 15, No. 2, February 1996, pp. 217-227.	
	24.	Chip Model with Wiring Cost Map, August 1983, IBM Technical Disclosure Bulletin, vol. 26, issu. 3A, pp. 929-933	
	25.	Dayan, T. et al., Layer Assignment for Rubber Band Routing, UCSC-CRI-93-04, January 20, 1993.	
	26.	Dayan, T., Rubber-Band Based Topological Router, A Dissertation, UC Santa Cruz, June 1997.	
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Examiner Signature		Date Considered	
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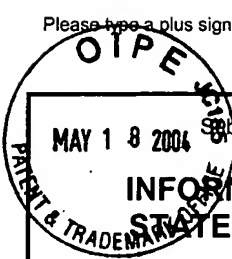
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**INFORMATION DISCLOSURE
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Sheet	4	of	9	Application Number	10/066,160
				Filing Date	1/31/2002
				First Named Inventor	Steven Teig, et al.
				Group Art Unit	2825
				Examiner Name	Dinh, Paul
				Attorney Docket Number	SPLX.P0073

NON PATENT LITERATURE DOCUMENTS

28.	Fujimura, K. et al, Homotopic Shape Deformation.	
29.	Hama, T. et al., Curvilinear Detailed Routing Algorithm and its Extension to Wire-Spreading and Wire-Fattening.	
30.	Hama, T. et al., Topological Routing Path Search Algorithm with Incremental Routability Test, IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, vol. 18, No. 2, February 1999, pp. 142-150.	
31.	Kobayashi, K. et al., A New Interactive Analog Layout Methodology based on Rubber-Band Routing, UCSC-CRL-96-12, June 13, 1996.	
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37.	Staepelaere, D. et al., Geometric Transformations for a Rubber-Band Sketch, A Thesis for a Master of Science in Computer Engineering, UCSC, September 1992.	
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39.	Su, J. et al., Post-Route Optimization for Improved Yield Using Rubber-Band Wiring Model, 1997 International Conference on Computer-Aided Design, pp 700-706, November 1997.	
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41.	Xing, Z. et al., A Minimum Cost Path Search Algorithm Through Tile Obstacles, slide presentation.	
42.	Xing, Z. et al., Shortest Path Search Using Tiles and Piecewise Linear Cost Propagation, IEEE, 2002, pp.145-158.	

Examiner Signature	Date Considered
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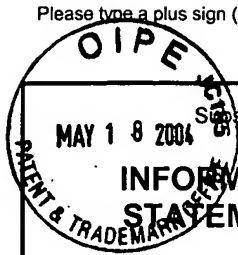
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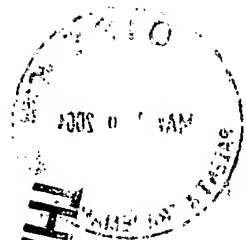
Application Number 10/066,160 Filing Date 1/31/2002 First Named Inventor Steven Teig, et al. Group Art Unit 2825 Examiner Name Dinh, Paul				Sheet	5	of	9
				Attorney Docket Number SPLX.P0073			
				NON PATENT LITERATURE DOCUMENTS			
				43. Xu, A More Efficient Distance Vector Routing Algorithm, UCSC-CRL-96-18, March 1997.			
				44. Yu, M.-F. et al., Fast and Incremental Routability Check of a Topological Routing Using a Cut-Based Encoding, UCSC-CRL-97-07, April 14, 1997.			
45. Yu, M.-F. et al, Interchangeable Pin Routing with Application to Package Layout, UCSC-CRL-96-10, April 25, 1996.				46. Yu, M.-F. et al., Pin Assignment and Routing on a Single-Layer Pin Grid Array, UCSC-CRL-95-15, February 24, 1995.			
47. Yu, M.-F. et al., Planar Interchangeable 2-Terminal Routing, UCSC-CRL-95-49, October 19, 1995.				48. Yu, M.-F. et al., Single-Layer Fanout Routing and Routability Analysis for Ball Grid Arrays, UCSC-CRL-95-18, April 25, 1995.			
49. Ahuja, R. et al., Faster Algorithms for the Shortest Path Problem, Journal of the Association for Computing Machinery, vol. 37, No. 2, April 1990, pp. 213-223.				50. Alexander, M. et al., Performance-Oriented Placement and Routing for field-programmable gate arrays, Proceedings of the European Design Automation Conference, pages 80-85, 1995.			
51. Alexander, M. et al., Placement and Routing for Performance-Oriented FPGA Layout, VLSI Design, Vol. 7, No. 1, 1998.				52. Andou, H. et al., Automatic Routing Algorithm for VLSI, 22 nd Design Automation Conference, 1985, pp. 785-788.			
53. Bagga, J. et al., Internal, External, and Mixed Visibility Edges of Polygons.				54. Berger, B. et al., Nearly Optimal Algorithms and Bounds for Multilayer Channel Routing, Journal of the Association for Computing Machinery, pp. 500-542, March 1995.			
55. Brady, L. et al., Channel Routing on a 60° Grid, extended abstract, pp.926-931.				56. Carothers, K., A Method of Measuring Nets Routability for MCM's General Area Routing Problems, 1999, pp. 186-192.			
57. Chen, D-S. et al., A Wire-Length Minimization Algorithm for Single-Layer Layouts							

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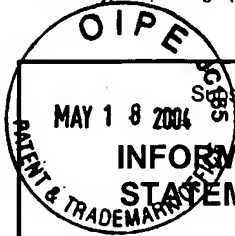
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number			10/066,160		
Filing Date			1/31/2002		
First Named Inventor			Steven Teig, et al.		
Group Art Unit			2825		
Examiner Name			Dinh, Paul		
Attorney Docket Number			SPLX.P0073		
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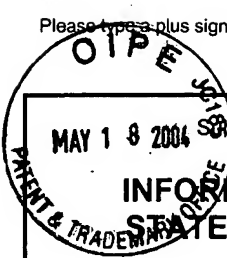
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STATEMENT BY APPLICANT**

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Application Number 10/066,160 Filing Date 1/31/2002 First Named Inventor Steven Teig, et al. Group Art Unit 2825 Examiner Name Dinh, Paul				Sheet	7	of	9		
				Attorney Docket Number			SPLX.P0073		

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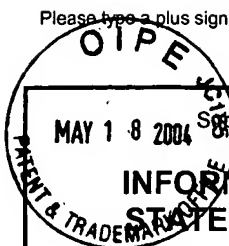
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							Filing Date	1/31/2002
							First Named Inventor	Steven Teig, et al.
							Group Art Unit	2825
							Examiner Name	Dinh, Paul
							Attorney Docket Number	SPLX.P0073

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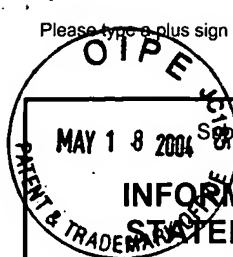
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				Group Art Unit	2825
				Examiner Name	Dinh, Paul
Sheet	9	of	9	Attorney Docket Number	SPLX.P0073

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